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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,362	02/05/2001	Toku Ishii	F-6756	3626
7590 01/14/2004				
Jordan and Hamburg 122 East 42nd Street New York, NY 10168				
EXAMINER RAHLL, JERRY T				
ART UNIT		PAPER NUMBER		
2874				

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/762,362

Applicant(s)

ISHII ET AL.

Examiner

Jerry T Rahl

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 7 is/are rejected.
- 7) ☒ Claim(s) 3-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 02-2001.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings submitted have been reviewed and determined to facilitate understanding of the invention. The drawings are accepted as submitted.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,814,133 to Matsuno et al. in view of U.S. Patent 5,638,478 Ikawura et al.
5. Matsuno et al. describes a polyethylene spacer (42) for an optical fiber cable with a thermoplastic resin (40) applied as an intermediate coating layer to a central tensile member (38), a main coating having continuous spiral grooves (see Figure 5) for accommodating optical fibers formed from polyethylene (see Col 11 Lns 23-37 and Tables 2-3) on the outer periphery of the intermediate coating layer where the spacer has a minimum rib thickness of 1.0 mm or less and a groove inclination angle of 18° or less (0°). The minimum rib thickness is not explicitly described as less than 1.0mm, but from the dimensions described in Example 9 (see Column 12) and the configuration shown in Figures 4-5, it can be seen that the minimum rib thickness is less

than 1.0 mm. Matsuno et al. does not expressly disclose the continuous spiral grooves as “inverted periodically”.

6. Matsuno et al. further describes the spacer housing a single optical fiber in the spiral grooves (see Col 2 Lns 55-59).

7. Ikawura et al. describes a spacer (11) for an optical fiber cable, surrounding a central tensile member, with continuous spiral grooves (13) for accommodating optical fibers that are inverted periodically in a direction along the length (see Figures 1A-2 and Col 7 Ln 33-Col 10 Ln 47).

8. Ikawura et al. further describes tape-form optical fibers (15) accommodated in the spiral grooves.

9. Matsuno et al. and Ikawura et al. are analogous art because they are from the same field of endeavor of optical fiber cable spacers. At the time of invention, it would have been obvious to a person of ordinary skill in the art to use the SZ spiral groove formation of Ikawura et al. with the spacer construction of Matsuno et al. The motivation for doing so would have been to reduce the torsion applied to the optical fibers (see Ikawura et al. Col 9 Lns 1-3).

10. At the time of invention, it would have been obvious to a person of ordinary skill in the art to use tape-form optical fibers of Ikawura et al. with the spacer construction of Matsuno et al. The motivation for doing so would have been to increase fiber density and organization of multiple fibers.

11. Therefore, it would have been obvious to combine Ikawura et al. with Matsuno et al. to obtain the invention as specified in Claims 1, 2, 6 and 7.

Allowable Subject Matter

12. Claim 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claim 3 describe resin density being lower at the roots of the ribs. Claim 4 describes roughness of the groove bottoms being 1.2 μm or less. Claim 5 describes the spiral progression angle determined by the formula presented in the claim. This is subject matter not described by the prior art of record.

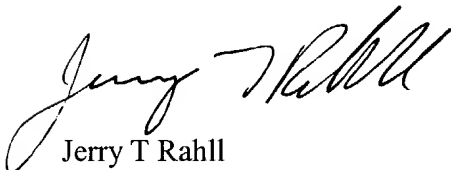
Conclusion

14. Prior art documents submitted by applicant in the Information Disclosure Statement filed on 05 February 2001 have all been considered and made of record (note the attached copy of form PTO-1449).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry T Rahll whose telephone number is (703) 306-0031. The examiner can normally be reached on M-F (8:00-5:30), with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (703) 308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Jerry T Rahll


AKM ENAYET ULLAH
PRIMARY EXAMINER